

PE/Cyanine5 anti-mouse NK-1.1 Antibody

Catalog# / Size	108715 / 25 µg 108716 / 100 µg
Clone	PK136
Regulatory Status	RUO
Other Names	NKR-P1C, NKR-P1B, Ly-55, CD161, CD161b, CD161c
Isotype	Mouse IgG2a, κ
Description	NK-1.1 surface antigen, also known as CD161b/CD161c and Ly-55, is encoded by the NKR-P1B/NKR-P1C gene. It is expressed on NK cells and NK-T cells in some mouse strains, including C57BL/6, FVB/N, and NZB, but not AKR, BALB/c, CBA/J, C3H, DBA/1, DBA/2, NOD, SJL, and 129. Expression of NKR-P1C antigen has been correlated with lysis of tumor cells <i>in vitro</i> and rejection of bone marrow allografts <i>in vivo</i> . NK-1.1 has also been shown to play a role in NK cell activation, IFN-γ production, and cytotoxic granule release. NK-1.1 and DX5 are commonly used as mouse NK cell markers.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	NK-1 ⁺ cells from mouse spleen and bone marrow
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE/Cyanine5 under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ^{1,2} , complement-dependent cytotoxicity ³ , <i>in vivo</i> depletion ^{4,5,9,10} , mediation of <i>in vitro</i> redirected lysis ⁶ , blocking of NK cell function ⁷ , induction of proliferation ⁸ , immunohistochemical staining of frozen sections ¹¹ , immunofluorescence microscopy ¹¹ , and spatial biology (IBEX) ^{16,17} . The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 108712).
Additional Product Notes	BioLegend is in the process of converting the name PE/Cy5 to PE/Cyanine5. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine5 products. Please contact Technical Service if you have any questions.
Application References	<ol style="list-style-type: none"> 1. Carlyle JR, <i>et al.</i> 1999. <i>J. Immunol.</i> 162:5917. (IP) 2. Sentman CL, <i>et al.</i> 1989. <i>Hybridoma</i> 8:605. (IP) 3. Koo GC, <i>et al.</i> 1984. <i>Hybridoma</i> 3:301. (Cyt) 4. Sentman CL, <i>et al.</i> 1989. <i>J. Immunol.</i> 142:1847. (Deplete) 5. Koo GC, <i>et al.</i> 1986. <i>J. Immunol.</i> 137:3742. (Deplete)
(PubMed link indicates BioLegend citation)	

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RRID

AB_493591 (BioLegend Cat. No. 108715)
 AB_493590 (BioLegend Cat. No. 108716)

Antigen Details

Structure	NKR-P1 gene family
Distribution	NK and NK-T cells in the NK1.1 mouse strains (C57BL, FVB/N, NZB)
Function	NK cell activation, IFN- γ production, cytotoxic granule release
Cell Type	NK cells, NKT cells
Biology Area	Immunology, Innate Immunity
Antigen References	<ol style="list-style-type: none"> 1. Lanier LL. 1997. <i>Immunity</i> 6:371. 2. Yokoyama WM, <i>et al.</i> 1993. <i>Ann. Rev. Immunol.</i> 11:613. 3. Koo GC, <i>et al.</i> 1986. <i>J. Immunol.</i> 137:3742. 4. Giorda R, <i>et al.</i> 1991. <i>J. Immunol.</i> 147:1701.
Gene ID	17059

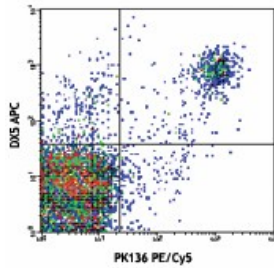
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-mouse NK-1.1, Biotin anti-mouse NK-1.1, FITC anti-mouse NK-1.1, PE anti-mouse NK-1.1, Purified anti-mouse NK-1.1, PE/Cyanine7 anti-mouse NK-1.1, PE/Cyanine5 anti-mouse NK-1.1, Alexa Fluor® 488 anti-mouse NK-1.1, Alexa Fluor® 647 anti-mouse NK-1.1, Pacific Blue™ anti-mouse NK-1.1, Brilliant Violet 711™ anti-mouse NK-1.1, APC/Cyanine7 anti-mouse NK-1.1, PerCP anti-mouse NK-1.1, PerCP/Cyanine5.5 anti-mouse NK-1.1, Alexa Fluor® 700 anti-mouse NK-1.1, Brilliant Violet 421™ anti-mouse NK-1.1, Brilliant Violet 570™ anti-mouse NK-1.1, Brilliant Violet 650™ anti-mouse NK-1.1, Brilliant Violet 510™ anti-mouse NK-1.1, Brilliant Violet 605™ anti-mouse NK-1.1, Purified anti-mouse NK-1.1 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse NK-1.1, Brilliant Violet 785™ anti-mouse NK-1.1, APC/Fire™ 750 anti-mouse NK-1.1, TotalSeq™-A0118 anti-mouse NK-1.1, Ultra-LEAF™ Purified anti-mouse NK-1.1, TotalSeq™-B0118 anti-mouse NK-1.1, TotalSeq™-C0118 anti-mouse NK-1.1, PE/Fire™ 810 anti-mouse NK-1.1

Product Data



C57BL/6 mouse splenocytes were stained with DX5 APC and NK1.1 (clone PK136) PE/Cyanine5.

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